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FIG. 2
PRIOR ART

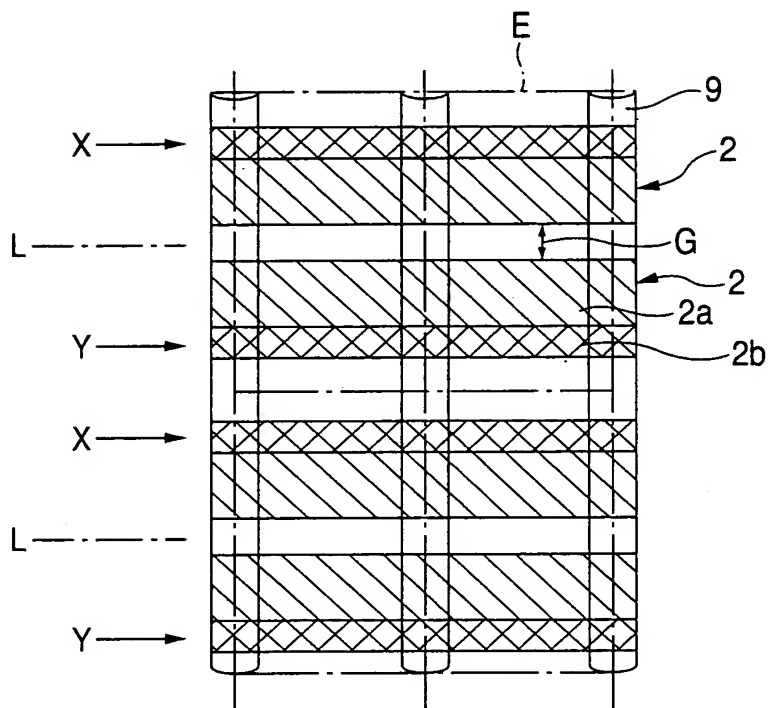


FIG. 3
PRIOR ART

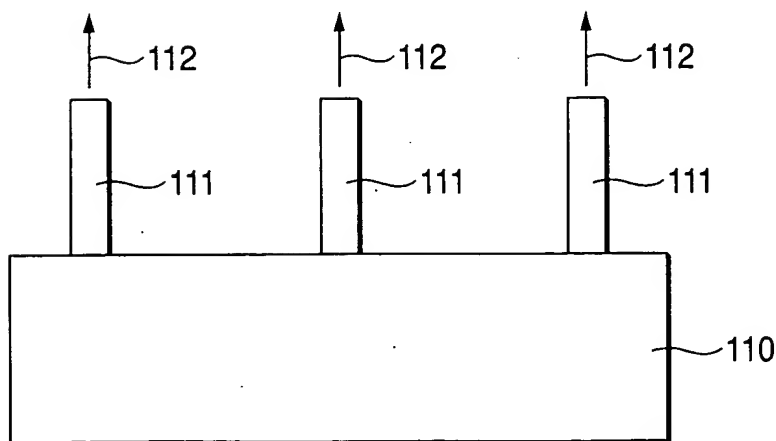


FIG. 4

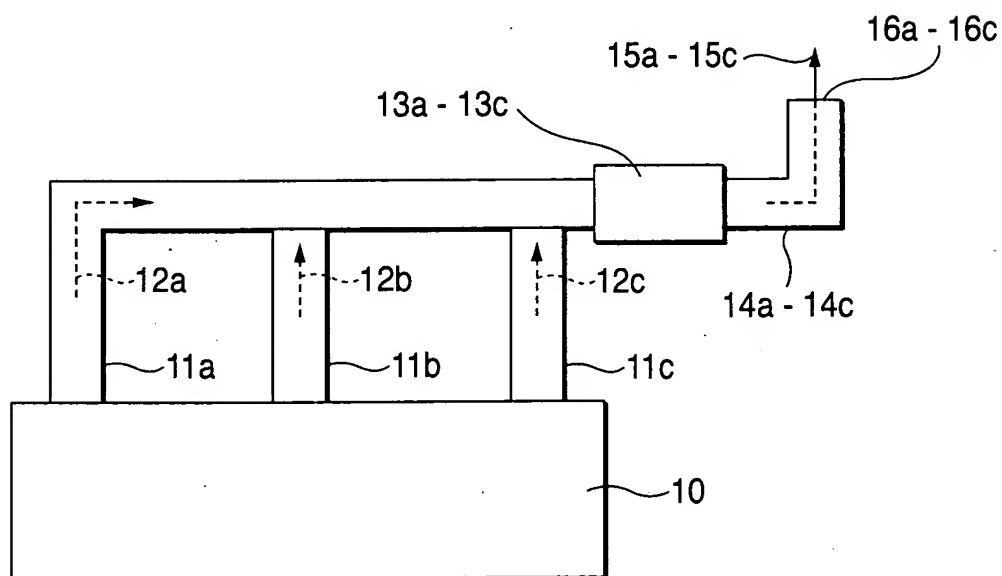


FIG. 5

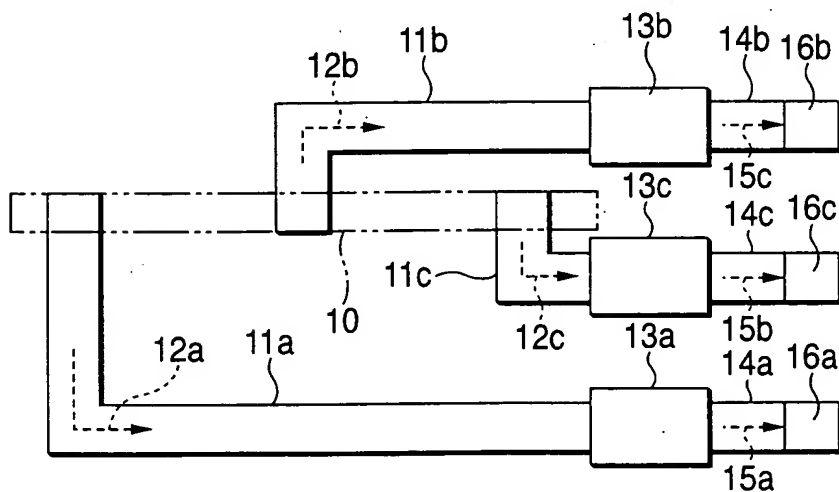


FIG. 6

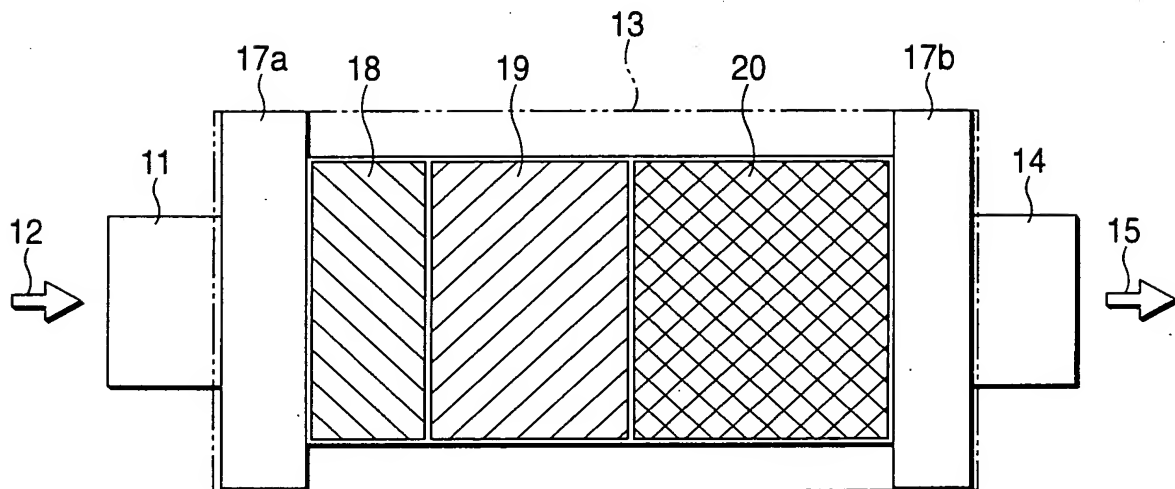


FIG. 7

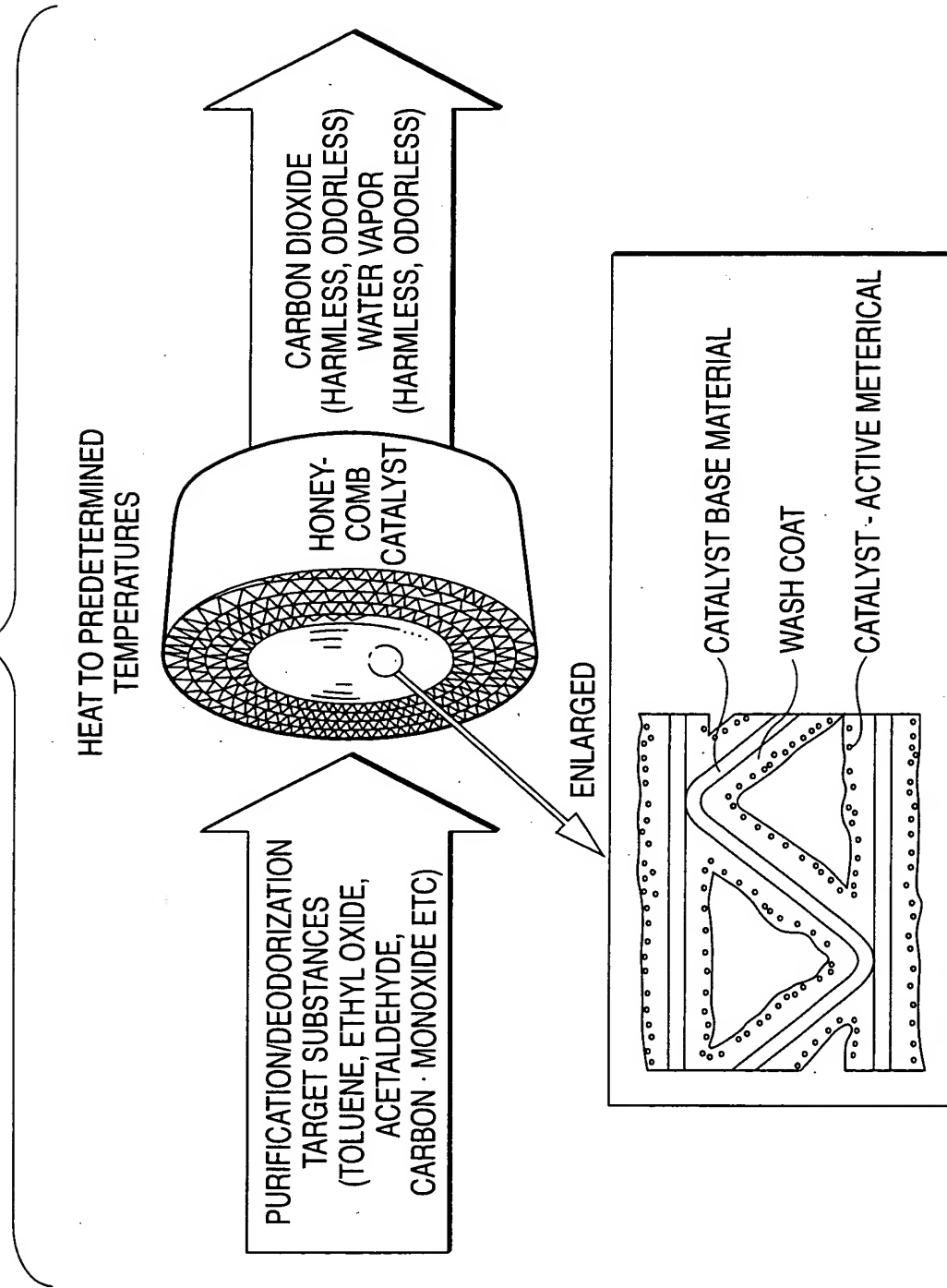


FIG. 8 (a)

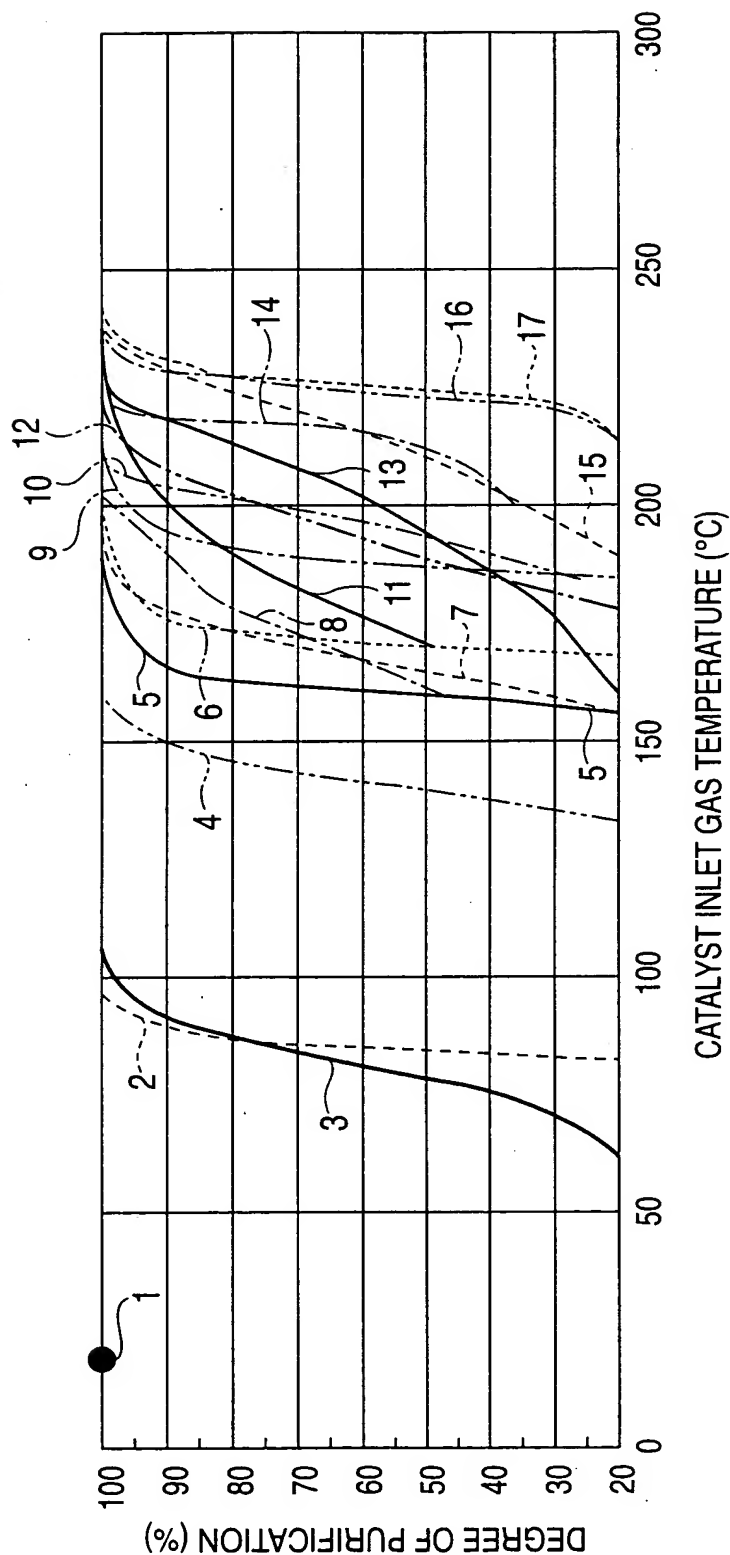
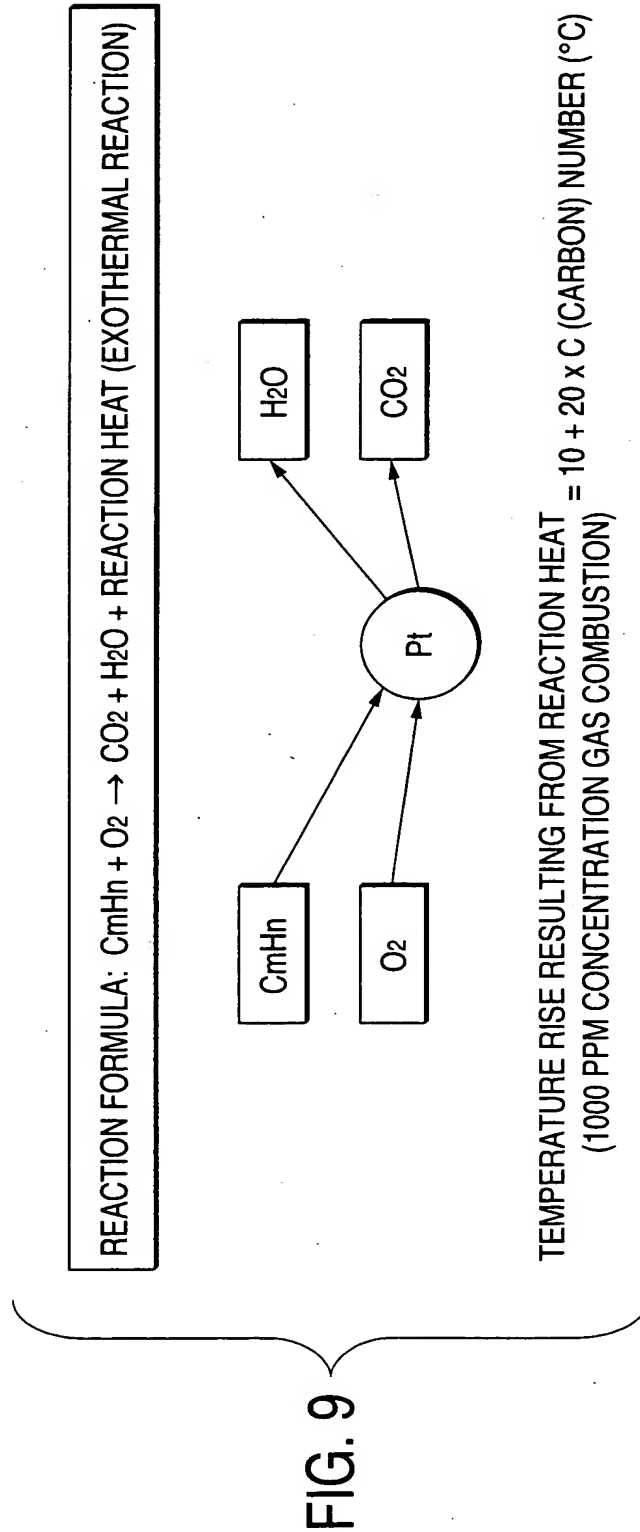


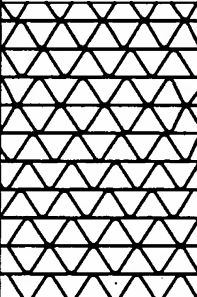
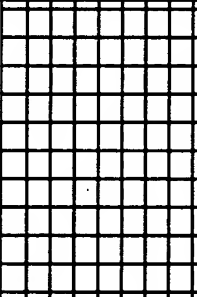
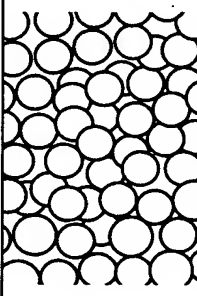
FIG. 8 (b)

| NO. | SUBSTANCE NAME | CHEMICAL FORMULA | CONCENTRATION (ppm) | SPACE VELOCITY (h ⁻¹) |
|-----|-------------------|---|------------------------|--------------------------------------|
| 1 | | H ₂ | 1% | 60,000 |
| 2 | | CO | 1,000 | 60,000 |
| 3 | | CH ₃ OH | 100 | 30,000 |
| 4 | | C ₂ H ₄ | 5,000 | 60,000 |
| 5 | | C ₆ H ₁₀ O | 550 | 60,000 |
| 6 | | C ₆ H ₅ CH ₃ | 550 | 60,000 |
| 7 | | C ₂ H ₅ COCH ₃ | 650 | 60,000 |
| 8 | | (CH ₃) ₂ S | 10 | 30,000 |
| 9 | | C ₆ H ₄ (CH ₃) ₂ | 550 | 60,000 |
| 10 | | NH ₃ | 300 | 30,000 |
| 11 | | (CH ₃) ₃ N | 30 | 30,000 |
| 12 | | CH ₃ CHO | 140 | 30,000 |
| 13 | | C ₂ H ₅ OH | 300 | 30,000 |
| 14 | | CH ₃ C ₆ H ₄ OH + C ₆ H ₅ OH | 660 + 440 | 60,000 |
| 15 | | (C ₂ H ₅) ₃ N | 300 | 30,000 |
| 16 | | CH ₃ COOH | 100 | 30,000 |
| 17 | | HCON(CH ₃) ₂ | 740 | 60,000 |



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FIG. 10

| CATALYST TYPE | METAL HONEYCOMB CATALYST | CERAMIC HONEYCOMB CATALYST | PELLET CATALYST |
|-------------------------------------|---|--|---|
| CATALYST TYPE |  |  |  |
| BASIC COMPOSITION | Fe-Cr-Al | SiO ₂ -Al ₂ O ₃ -MgO | Y-Al ₂ O ₃ |
| COEFFICIENT OF HEAT CONDUCTIVITY | LARGE | SMALL | SMALL |
| FILLED SPECIFIC GRAVITY | 0.4 TO 0.6 | 0.6 TO 0.7 | 0.4 TO 0.8 |
| HEAT CAPACITY | SMALL | MODERATE | LARGE |
| STANDARD SV VALUE | 30,000 TO 60,000 h ⁻¹ | 20,000 TO 40,000 h ⁻¹ | 10,000 TO 30,000 h ⁻¹ |
| PRESSURE LOSS (*) | 5.5 | 7.1 | 41.5 |
| MECHANICAL STRENGTH | STRONG | WEAK | MODERATE |
| THERMAL SHOCK RESISTANCE | STRONG | WEAK | MODERATE |

(*: MEASURED VALUE UNDER AN ATMOSPHERE OF 200°C AND 1 Nm/s.)